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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,600	08/10/2001	Te-Kai Liu	YO998222	6853

30743 7590 05/25/2004

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RESTON, VA 20190

EXAMINER

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 05/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/925,600

Applicant(s)

LIU ET AL.

Examiner

SIMON D NGUYEN

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 28-36 and 38-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-36 and 38-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 28, 31-36, 38, 40, 42-43, 46, 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonta et al. (5,758,264).

Regarding claim 28, Bonta discloses a method for predicting quality of wireless communication within a coverage area (abstract), comprising: generating a digital map including information indicative of a travel route between locations; determining a current location of a mobile unit along the travel route; receiving information indicative of a quality of wireless communications at at least one point ahead of the current location of the mobile unit along the travel route and informing the user of the quality of wireless communications at a particular point (fig.1, column 2 line 24 to column 3 line 67).

Regarding claim 38, this claim is rejected for the same reason as set forth in claim 28.

Regarding claims 31-32, Bonta discloses displaying a digital map including information indicative of a quality of wireless communications at one location (column 2 lines 52-67). It should be noted that an updating of the map with the signal quality is inherently since the map and quality of signal in one location will be changed in time.

Regarding claims 33-35, Bonta further discloses the wireless unit is in a vehicle and information indicative of signal quality is derived from each location of vehicle, wherein the information is displayed (fig.1, column 2 lines 1-67). It should be noted that a service provider is inherently in the communication system for transmitting as well receiving map data to the user.

Regarding claim 36, Bonta discloses a method for generating a map indicative of quality of wireless communications (title, abstract, fig.1), comprising: generating a digital map; identifying a location of a user on the digital map; and superimposing information indicative of a quality of communication s at at least one of the location of a user (column 2 line 24 to column 3 line 25).

Regarding claim 40, Bonta further discloses wherein the predicting step is performed while the user is communicating over a wireless network (column 2 lines 15-23, 49-50, column 5 line 64).

Regarding claim 42, Bonta discloses method for initiating wireless communications, comprising: detecting a user request to initiate wireless communication (column 5 lines 58-65);determining a position of a user; calculating a route; and predicting signal quality over the route (figs 1-3, column 2 line 1 to column 3 line 25).

Regarding claim 46, this claim is rejected for the same reason as set forth in claim 42.

Regarding claims 43, 48, Bonta discloses the predicted signal quality on the travel route and notifying (displaying) the user of the predicted signal quality (fig.1, column 2 lines 52-67).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 29-30, 39, 41, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonta et al. (5,758,264) in view of Chang (6,188,890).

Regarding claims 29-30, Bonta discloses placing a call from the user along a system (column 3 lines 42-52, column 5 lines 58-65). However, Bonta fails to disclose a warning.

Chang, in the same field of invention, discloses informing the user that the call is in danger of being dropped (fig. 9, column 2 lines 57-39) which means the user has options whether do not make a call, to drop the call, or move to other direction. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Bonta, modified by Chang to prevent the user from making a call or avoid the area with a low quality signal in order to save a service charge.

Regarding claim 39, this claim is rejected for the same reason as set forth in claim 29.

Regarding claims 41 and 44, these claims are rejected for the same reason as set forth in claim 30. It should be noted that the user's decision for dropping a call, not initiating a call in an area with a low signal quality is obvious to one skilled.

5. Claims 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonta et al. (5,758,264) in view of Bonta (6,014,565).

Regarding claims 45 and 47, Bonta (264) does not specifically disclose a plurality of routes.

Bonta (565), in the same field of invention, discloses a plurality of routes for the mobile traveling from one location to a destination including directing the mobile unit to travel to another location (fig.3) and selecting a route (a route having a set of BTS with the highest total counts wherein each count is a successful connection (good quality signal) from the plurality of routes (column 10 lines 1-4). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Bonta, modified by Bonta (565) to prevent the user from making a call or avoid the area with a low quality signal in order to save a service charge.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (703) 308-1116. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

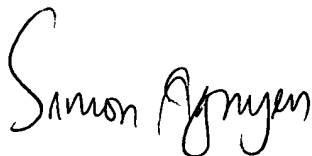
Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Simon Nguyen

May 19, 2004

A handwritten signature in black ink that reads "Simon Nguyen". The signature is written in a cursive, flowing style.